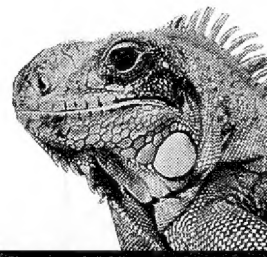


## ACADEMY

## Newsletter

DEDICATED  
TO SCIENTIFIC  
RESEARCH AND  
EDUCATION,  
INSPIRING  
RESPECT FOR  
THE NATURAL  
WORLD



Test yourself on your  
natural history knowl-  
edge – *Biodiversity  
Resource Center*

Learn about form and  
function, geographical  
differences, and  
potential uses of 1.6  
million dried plant  
specimens – *Botany*

See live insects and the  
diversity of color and  
pattern among insects –  
*Entomology*

The Academy is in the  
news! See T.V. and  
news clippings – *Public  
Information*

See critters without  
backbones (who are not  
insects) and different  
types of fossils, from  
bones to footprints –  
*Invertebrate Zoology  
and Geology*



See a demonstration  
of the skill needed  
to prepare a reptile  
specimen for the  
collection – *Herpetology*

Touch a variety of  
marine mammal bones –  
*Ornithology and  
Mammalogy*

## THE ACADEMY RINGS IN SPRING WITH MEMBERS OPEN HOUSE

Wednesday, May 10 @ 6 p.m. to 9 p.m.

*C*ome discover the ultimate science adventure! When you go behind the scenes at the Academy, prepare to be amazed at every turn as you take this intimate journey through the world of science. It's your chance to meet the scientists and staff, view collections in our eight research departments and ask questions. It's our way of saying "thank you" to our members for your interest and support.



Start off the evening with the new exhibit of all that glitters: the Buccellati collection of gemstones and gold in the recently-refurbished Gem and Mineral Hall. Also lighting up the main floor, Science In Action and the "Kids from CAOS" with a special earth celebration puppet show at 6:30 p.m. You won't want

to miss Academy photographers Susan Middleton and David Liittschwager who will be on hand from 6:30 p.m. to 8:30 p.m. in the "Witness" exhibit to talk with you and sign their book. This exhibit of distinctive and powerful portraits of threatened plants and animals closes May 14.

Come and enjoy the high-spirited Barbary Coast Cloggers in the auditorium at 7:30 p.m. Clogging was developed hundreds of years ago as a dance of immigrants in the Eastern United States. Clogging has remarkably diverse origins — from Native American, African as well as European dance traditions.

The Academy Store will be open for your shopping convenience, offering a free "Witness"

poster after \$25 in purchases. Enjoy dinner in the Academy's cafe, from 5:30 p.m. (allowing you to come in early to dine) to 7:30 p.m.

Three self-guided tours, upstairs, downstairs and the invertebrate zoology and geology wing (entering through Gem & Mineral Hall), will take you backstage through our research departments.

On your downstairs trek, check in at the education department to talk with staff and pick up information on what to do with the kids this summer, either through Camp Academy or Junior Academy classes. Also experience two delightful adult and family education demonstrations: Kathleen Hubbard will show you how to plait basketry materials into wonderful baskets, while Susan Tibbon will create elaborately painted spice boxes made out of citrus skins.

The staff has planned an exciting evening for you, so we hope you'll join us. Open house is an exclusive benefit for members only. This is the perfect time to invite your friends to become members and show them around.

Please consider a gift membership, which offers year-round benefits and helps support education and research at the Academy (see order form on back page).



Photos: Dong Lin





## See the Night Sky Indoors

**Current Sky Shows:** Experience realistic simulations of the night sky and celestial events with the following sky shows. Tickets can be purchased a half hour before the show at the box office once inside the Academy. For sky watching information and detailed descriptions of shows, call the planetarium at 750-7141.

### May Schedule

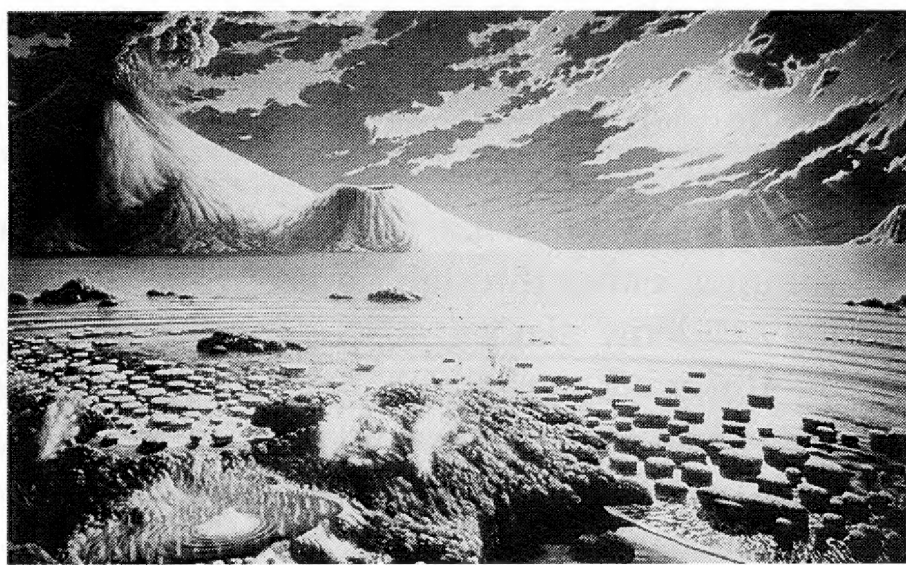
Sky Show / Description	weekday	weekend
<b>Realm of the Galaxies</b> / <i>their secrets</i>	2 p.m.	2 & 4 p.m.
<b>Extremes</b> / <i>cosmic record holders</i>	—	1 & 3 p.m.
<b>StarTalk</b> / <i>tour of the night sky</i>	—	noon
<b>Touch the Stars</b> / <i>a family show</i>	—	11 a.m.

For more information, please call 750-7141.

## The Origins of Life

**B. Dean Lecture:** What planetary environments are necessary for the evolution of life? Various prebiotic models of early Earth suggest that life-supporting conditions may have existed as early as 4.4 billion years ago. But was early organic matter able to survive heavy bombardment of material left over from the formation of the solar system? Did such impacts actually aid the development of life by synthesizing compounds?

Dr. Sherwood Chang, chief of the planetary biology branch of NASA-Ames Research Center, studies the origin and distribution of organic matter and life in the universe. He is a noted authority on the synthesis of organic matter on prebiotic Earth.



ARTIST'S RENDITION OF EARTH'S EARLIEST ECOSYSTEM  
3.5 BILLION YEARS AGO.

Tue., May 23 — 7:30 p.m.  
Tickets, \$2 each

© For advance tickets, use order form. Tickets may be available on a standby basis. Please call 750-7141, for more information.  
© This lecture concludes the Spring '95 Benjamin Dean Lecture Series. The fall series will be held September through December.

## School Shows Provide Heavenly Knowledge

The Academy's Planetarium is doing its part to create the next generation of star gazers by providing special sky shows for school children.

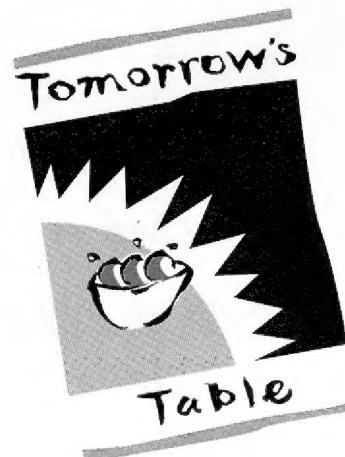
The Planetarium puts on up to two shows each weekday morning during the academic year, in addition to the regular 2 p.m. public show. Three different sky shows cater to different grade levels. Cartoon characters such as Mr. Sun and Mr. Owl explain the sky's bright objects to preschoolers and kindergartners; older students play detective and follow the popular computer game character Carmen Sandiego, gathering clues to stop her intergalactic capers.

## Appalachian Puppetry

Using wooden hand and rod puppets carved in the backwoods of Southwest Virginia, the Poor Puppet Theatre Company performs the mountain tale of "Wicked John," a feisty character whose legendary meanness gets him into heaps of trouble.

Sat., May 6 — 1 p.m. to 2 p.m.  
(Auditorium)

## FOOD FOR THOUGHT



Examine the future of that most immediate and intimate of human needs — food. Tomorrow's Table, a

lively half-day symposium on Saturday, June 10, from 1 p.m. to 5 p.m., will provide food for thought about our own view of food and nutrition, and about critical economic and cultural issues involved in local and future global food production.

The afternoon will include three presentations spanning perspectives from the personal to the global. Beginning with a discussion of topics related to health, nutrition and personal decision making, we will move on to an examination of issues related to future agricultural production in California. The program will conclude with a vivid account of the complex interactions of the cultural, environmental and technological issues involved with the production of food worldwide.

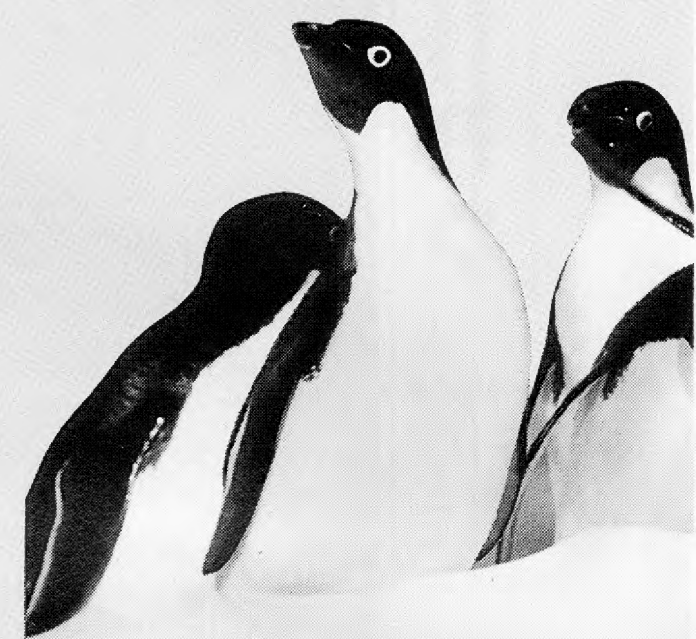
Tomorrow's Table is sponsored by the Academy's anthropology department and the Rietz Food Technology Foundation. Ticket prices are \$20 for members and \$22 for nonmembers, and are available by mail order only. For more information, please call 750-7163.

## Maidu Indian Basket

Denise Davis demonstrates coiling techniques of Maidu basket-weaving skills shared from family members and while growing up in Northern California. The baskets are made of natural materials (bark, roots, grass) and feature symbolic designs.

Sat., May 13 — 1 p.m. to 2 p.m.  
(Auditorium)

## ACADEMY



Bill Diebenow

## Antarctic and the

Explore this last frontier and one of the most beautiful in the world with John and Pam Diebenow and their satellite islands about penguins returning to ancient breeding grounds, seals rearing their chicks on cliffs and whales and seals feasting on krill. The 170-passenger *M.S. Hanseatic* offers luxurious outside staterooms with views, showers, a fleet of 14 Zodiacs, and a 180 degree panoramic view.

Jan. 22-Feb. 6  
Cost: \$6,850-\$12,750 per person (in double occupancy)



Clipper Cruiseline

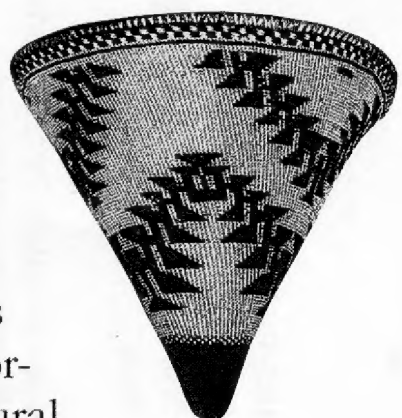
Panama Canal aboard the *M.V. Clipper* to explore the San Blas Islands and dugout canoes.

Dec. 19-31  
Cost: from \$3,560 (double occupancy)

For more information and detailed itineraries, please call the travel agent.



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## French Songs

Guitarist Simon Dray, who comes from the Bordeaux region of France, plays a medley of French songs, including a selection of his own original compositions as well as pieces by Jacques Brel.

Sat., May 20 — 1 p.m. to 2 p.m.  
(Auditorium)

Explore cultural traditions from around the world. Free after general admission. Call 750-7164 for information.

## TRAVEL



## Falkland Islands

of the few truly pristine regions  
McCosker. This awesome conti-  
nd with life — millions of pen-  
ng colonies, albatrosses and pe-  
blooming with brilliant lichens,  
krill. The recently built five-star,  
fers luxuriously appointed, spa-  
ews and full-size bathtubs and  
nd an observation lounge with

(including air/land/sea from Miami)

## Holiday Cruise to Costa Rica

This exploratory journey, with  
guide Tom Daniel, will take you  
o the luxuriant rain forests, de-  
serted beaches and windswept  
volcanic summits of Costa Rican  
national parks and to the human-  
made phenomenon of the  
*Yorktown Clipper*. You also will  
nd the Sambu River in Zodiac

ncy), plus airfare

eraries on these and other 1995 tours,  
office at 750-7348.

## Elizabeth Marshall Thomas At Herbst Theatre

Animal behavior expert and anthro-  
pologist Elizabeth Marshall Thomas  
has traveled the world doing ex-  
tensive fieldwork in her efforts to  
understand different species and  
cultures. She has applied her an-  
thropological experience to the  
study of dogs and cats to produce  
two enormously popular books:  
*The Hidden Life of Dogs* and *The  
Tribe of Tiger*. Thomas is currently  
a research associate in animal be-  
havior at the Laboratory of Orni-  
thology at Cornell University.

She will be presented in conver-  
sation with Dr. Philip Zimbardo  
Thursday, May 18 at 8 p.m. in the  
Herbst Theatre (401 S. Van Ness  
Ave.). Tickets are \$12 members and  
\$15 nonmembers. To order tickets,  
please call City Box Office at 392-4400.

This concludes the California  
Academy of Sciences' Conversations  
& Readings at the Herbst Theatre  
lecture series for 1995.

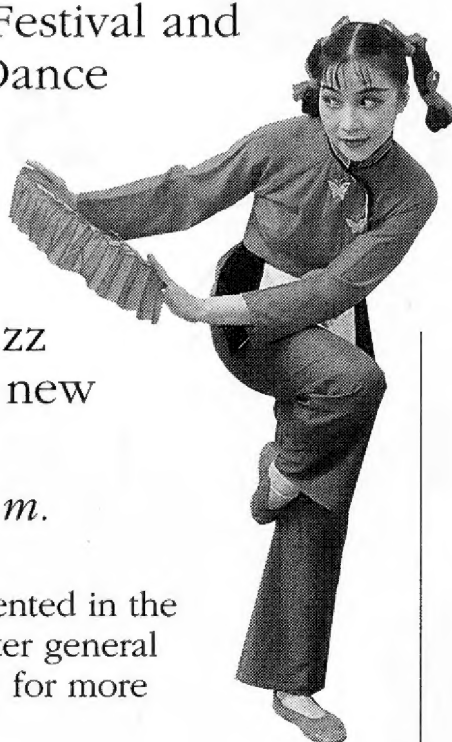
## YOUNG AUDIENCES

## Lily Cai — Chinese Dance

Families will delight in experi-  
encing the exquisite dancing of  
Lily Cai, a principal dancer  
with the Chinese Opera House  
for eight years. Cai explains  
and performs numerous Chi-  
nese folk and classical dances  
complete with beautiful cos-  
tumes and props. She is the  
recipient of several choreogra-  
phy grants, has performed for  
the Ethnic Dance Festival and  
the International Dance  
Festival, and re-  
cently collabo-  
rated with Di-  
mensions Dance  
Theatre (African-jazz  
dance) to create a new  
dance form.

Sun., May 28 — 1 p.m.

This family series is presented in the  
auditorium and is free after general  
admission. Call 863-1719, for more  
information.



## Curators' Reception a R"EEL" Hit With Donors



Dong Lin

John  
McCosker,  
chair of  
aquatic  
biology,  
capti-  
vates  
Acad-

emy donors with a display illustrating the diversity  
of eels at the annual Curators' Reception. The  
evening, centered around the theme "Diversity Is  
the Spice of Life," featured a fascinating array of  
specimens and artifacts from Academy collections,  
slides of research expeditions from around the  
world, scientific publications and the latest in  
research data bases. The Curators' Reception is a  
special benefit for members of the Academy's  
curators', director's and president's giving circles.  
Come join us! For information about becoming a  
donor circle member and participating in next  
year's Curators' Reception, please call Sally  
Donnell in the development office at 750-7280.

## ADULT & FAMILY EDUCATION

## Colored Pastels and Natural Elements

Explore the exciting and popular media of colored  
pastels as you create colorful landscape images with  
instructor Vesta Kirby. We'll explore a variety of tech-  
niques including layering color and experiment with  
textured paper. A combination of indoor technique  
sessions with outdoor fieldwork will be used. Appro-  
priate for beginning and experienced artists.

May 6 & 7 — 10 a.m. to 4 p.m.

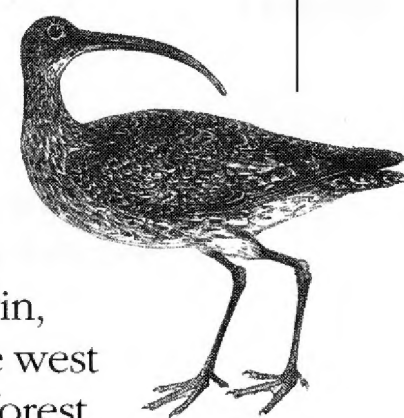
Cost: \$85 members/\$95 nonmembers (does not include  
materials)

## Audubon Canyon Ranch and Point Reyes National Seashore

Guide Dan Murphy will lead a bus tour  
through a number of bird habitats from the  
urban corridor of San Francisco and east Marin,  
through the agricultural and park lands of the west  
Marin hills. You'll explore the Douglas fir forest,  
eucalyptus woodlands and open fields for various resi-  
dent land birds at Point Reyes National Seashore Head-  
quarters. At nearby Five-Brooks Pond we'll see land  
birds in the willows and water birds. At Bolinas Lagoon  
and Audubon Canyon Ranch, after a leisurely lunch,  
we'll take a hike to see nesting great egrets and great  
blue herons. You also will have free time to explore.

May 13 — 8:30 a.m. to 4:30 p.m.

Cost: \$40 members/\$50 nonmembers (includes transpor-  
tation and soft drinks)



## In Search of Ancient Astronomies

Taught in Morrison Planetarium, instructor Mike  
Bennett will introduce you to the amazing world of  
archaeoastronomy. Archaeologists and astronomers  
are uncovering more and more evidence that ancient  
peoples developed a very sophisticated knowledge  
of the heavens, and used that knowledge to develop  
accurate calendars, foretell the seasons, and even  
predict eclipses with 100 percent accuracy.

May 3-31 (4 Wed.) — 7 p.m. to 9 p.m.

Cost: \$60 members/\$70 nonmembers

For more information, contact the adult and family education  
program at 750-7100.





THE  
ACADEMY  
STORE

Things To Remember <sup>va</sup> Mother's Day is May 14



- 1.) Make mom breakfast in bed, 2.) Mow lawn and clean house, 3.) Make dinner reservations,  
4.) Shop the Academy Store for: mother's day cards, beautiful T-shirts and vests, unique  
hand-crafted jewelry, and rain forest bath products

MAY

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
<p><b>7</b></p> <p><b>14</b> "Witness: Endangered Species of North America" exhibit closes</p> <p><b>28</b> Lily Cai — Chinese Dance, 1 p.m. (Young Audiences)</p>	<p><b>8</b> <b>MEMBERS</b> please bring your membership card when you visit the Academy</p> <p><b>15</b></p> <p><b>22</b> <b>PLANETARIUM SKY SHOWS</b> on weekends at 11 a.m., and at noon, 1, 2, 3 and 4 p.m.</p> <p><b>29</b></p>	<p><b>9</b> <b>LASERIUM SHOWS</b> Thursday–Sunday, evenings, call 750-7138</p> <p><b>16</b></p> <p><b>23</b> Origins of Life, 7:30 p.m. (Planetarium Lecture)</p> <p><b>30</b></p>	<p><b>3</b> <b>Free Day</b> First Wednesday of each month</p> <p><b>10</b> Members Open House, 6 p.m. to 9 p.m. (Member's event)</p> <p><b>17</b> <b>PENGUIN FEEDINGS</b> are at 11:30 a.m. and 4 p.m. every day</p> <p><b>24</b></p> <p><b>31</b> <b>DOLPHIN FEEDINGS</b> are at 10:30 a.m., and 12:30, 2:30 and 4:30 p.m. every day</p>	<p><b>4</b> "Buccellati: Artistry in Gemstones &amp; Gold" exhibit opens</p> <p></p> <p><b>18</b> Elizabeth Marshall Thomas, 8 p.m. (Conversations at the Herbst Theatre)</p> <p><b>25</b></p>	<p><b>5</b> <b>PLANETARIUM SKY SHOWS</b> on weekdays at 2 p.m.</p> <p><b>12</b> <b>SCIENCE IN ACTION</b> General programs Sun.–Fri. at 11 a.m. Children's programs Sat. at 12:30 &amp; 3 p.m.; this month's topic is a celebration of <i>Islands</i>.</p> <p><b>19</b></p> <p><b>26</b> <b>PERMANENT EXHIBITS</b> <b>The Touch Tidepool</b> is temporarily closed due to Roundabout renovation. A special portable tidepool with user-friendly animals, video and microscope will be open daily from 11 a.m. to 2 p.m. (to 3 p.m., weekends).</p>	<p><b>6</b> Astronomy Day, 10 a.m. to 5 p.m. indoors/ 7 p.m. to 10 p.m. outdoors (Planetarium)  Appalachian Puppetry, 1 p.m. (Traditional Arts)</p> <p><b>13</b> Maidu Indian Basketry, 1 p.m. (Traditional Arts) </p> <p><b>20</b> French Songs, 1 p.m. (Traditional Arts)</p> <p><b>27</b> <b>FISH ROUNDABOUT</b> closed for repairs until summer 1995</p>

JUNE DATES TO REMEMBER

Jun. 10 - Tomorrow's Table, 1 p.m. to 5 p.m. (Rietz Food Technology Symposium)  
Jun. 10 - Festival of Fragrance Day  
Jun. 12–15 - Planetarium closed for sky show change

UPCOMING MEMBERS MEETINGS

Jun. 14 - Gems & Jewels, with Larry French ("Buccellati" exhibit).  
Jul. 12 - Dancing to the Fossil Record, with Ray Troll & Brad Matsen  
Aug. 9 - Coral Reefs of the Western Pacific, with Gary Williams of IZ&G

California Academy of Sciences  
Golden Gate Park  
San Francisco, CA 94118

ORDER FORM

Non-Profit Organization  
U.S. Postage Paid  
Permit No. 7544  
San Francisco

Address Correction Requested

PLANETARIUM'S B. DEAN LECTURE SERIES

Quantity \_\_\_\_\_ Total \_\_\_\_\_  
Origins of Life / May 23 \_\_\_\_\_ x \$2 \_\_\_\_\_ = \_\_\_\_\_  
TOTAL \$ \_\_\_\_\_

ACADEMY CONVERSATIONS & READINGS AT THE HERBST THEATRE

To order tickets for Elizabeth Marshall Thomas, May 18, please call  
City Box Office at 392-4400.

RIETZ FOOD TECHNOLOGY FOUNDATION SYMPOSIUM

Qty/Mem. \_\_\_\_\_ Qty/Nonmem. \_\_\_\_\_ Total \_\_\_\_\_  
Tomorrow's Table / Jun 10 \_\_\_\_\_ x \$20 \_\_\_\_\_ x \$22 \_\_\_\_\_ = \_\_\_\_\_  
TOTAL \$ \_\_\_\_\_

GIFT MEMBERSHIP

I wish to give a gift membership to: \_\_\_\_\_

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City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

Phone: \_\_\_\_\_

☐ \$50 Family/Grandparent ☐ \$40 Individual ☐ \$35 Dual Senior ☐ \$30 Senior/Student

DONATIONS

I would like to support the Academy with a donation. \$ \_\_\_\_\_

TOTAL PAYMENT ENCLOSED

\$ \_\_\_\_\_

PAYMENT METHOD

☐ Check ☐ VISA ☐ MasterCard ☐ American Express

Credit card charges gladly accepted over \$10.

Card# \_\_\_\_\_

Exp. Date \_\_\_\_\_

Signature \_\_\_\_\_

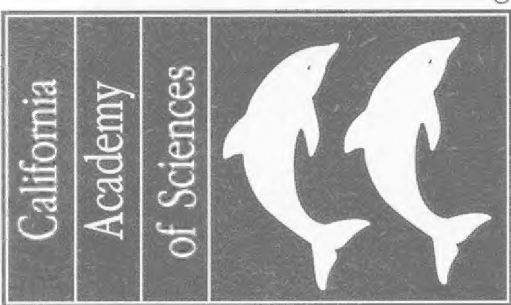
MAKE CHECK PAYABLE TO: C.A.S. and mail with this coupon form to:

Membership Office, Ticket Services

California Academy of Sciences, Golden Gate Park, San Francisco, CA 94118

Daytime Phone \_\_\_\_\_

Include a self-addressed, stamped envelope for each series to which you subscribe.  
No refunds/exchanges.



The Academy includes the  
Natural History Museum,  
Steinhart Aquarium and Morrison  
Planetarium. Open every day  
from 10 a.m. to 5 p.m. July 4–Labor  
Day we're open until 7 p.m.

VISITOR SERVICES

Academy Information: 415-750-7145

Academy Store: 750-7410

Admissions: 750-7159

Aquarium: 750-7247

Biodiversity Center: 750-7361

Development Office: 750-7216

Docent Tours: 750-7155

Education Office: 750-7100

Group Information: 750-7043

Job Hotline: 750-7333

Laserium: 750-7138

Lectures: 750-7128

Library: 750-7102

Membership Office: 750-7111

Planetarium: 750-7141

Planned Giving: 750-7216

Security: 750-7000

Switchboard: 221-5100

Travel: 750-7348

Volunteer Services: 750-7154

Weekend Information: 750-7375

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